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NOTES ON THE GENUS *SERICORNIS* GOULD

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*Sericornis*¹ is one of the most difficult genera of the Australian region. I have tried in an earlier paper (1930, Ornith. Monatsber., pp. 176–178) to settle some of the problems of nomenclature of this genus, but many questions remained to be answered. The splendid series collected by the Archbold-Rand New Guinea Expedition of 1933, together with the material of the Rothschild collection, have permitted a new survey of the genus, which has clarified some of the problems. Dr. Stresemann has been so kind as to send me the material of the Berlin Museum, including several types, for which I am deeply obliged to him.

One of the principal aims of the present review is to outline a more natural classification of this genus than that proposed by Mathews, the last reviewer. He recognizes the following species (1930, 'Syst. Avium Australasianarum,' pp. 611–618):

- (1) *Neosericornis citreogularis* (Gould) (p. 611)
- (2) *Sericornis arfakianus* Salvadori (p. 611)
- (3) " *olivaceus* Salvadori (p. 612)
- (4) " *perspicillatus* Salvadori (p. 612)
- (5) " *papuensis* (DeVis) (p. 612)
- (6) " *nigrorufa* Salvadori (p. 613)
- (7) " *becarii* Salvadori (p. 613)
- (8) " *bürgersi* Stresemann (p. 613)
- (9) " *magnirostris* (Gould) (p. 613)
- (10) " *keri* Mathews (p. 614)
- (11) " *frontalis* (Vigors and Horsfield) (p. 614)
- (12) " *laevigaster* Gould (p. 614)
- (13) " *minimus* Gould (p. 615)
- (14) " *maculatus* Gould (p. 615)
- (15) " *tyrannulus* DeVis (p. 617)
- (16) *Tasmanornis humilis* (Gould) (p. 617)

To these are to be added one species omitted by Mathews,

- (17) *Sericornis aruensis* Ogilvie-Grant

and several species included by Mathews in other genera:

- (18) *Gerygone? rufescens* Salvadori (p. 458)
- (19) *Arfakornis arfakiana* (Salvadori) (p. 465)
- (20) *Aethomyias spilodera* (Gray) (p. 478)

¹ *Sericornis* means silk bird. *Ornis* has both masculine and feminine gender, but according to several Greek dictionaries, consulted by me, masculine is the preferred gender. For this reason I shall use *Sericornis* exclusively in the masculine gender.

This arrangement not only fails to group the related species together, but it also lists as full species several forms which are really nothing but geographical representatives. One of the species (*nigrorufa*, No. 6) belongs to the genus *Crateroscelis*, where I have placed it already in an earlier paper (1931, Mitt. Zool. Mus. Berlin, XVII, p. 688). Another species (*tyrannulus*, No. 15) apparently also belongs to another genus. Neither the description nor the locality speaks for its retention in the genus *Sericornis*. The type locality, Charleville, lies in the dry interior of Queensland with less than 20 inches of rain per year, an area not inhabited by any member of this genus. Campbell (1935, Emu, XXXIV, pp. 267-273) has discussed several other species which he considers related to *Sericornis*, though generically distinct. Of these, *Acanthornis magnus* might well be included in the genus *Sericornis*. It agrees well with *S. frontalis* and *citreogularis* in its general type of coloration and is also similar in its morphological features, except for the slender, curved bill. If recognized, *Acanthornis* would be the only endemic avian genus of Tasmania.

The morphological characters of the genus *Sericornis* are ill-defined as is the case with most genera of passerine birds. They have been discussed by Meise in his review of the genus *Gerygone* (1931, Novit. Zool., XXXVI, pp. 318-319). The most remarkable fact is that the genus is usually put in the Sylviidae, but that some of its species were described as Muscicapidae (*arfakianus*, *rufescens*, *spilodera*), and that another (*nigrorufa*) is now included in the genus *Crateroscelis* of the Timaliidae. This illustrates the impossibility of giving a clearly cut generic definition of this genus which, in its characters, ranges all the way from the "Muscicapidae" through the "Sylviidae" to the "Timaliidae." On the other hand nothing would be gained if we should try to break up the assemblage of species which is now included in this genus.

As the result of my studies, I propose the following arrangement of the species of this genus:

- I.—*citreogularis* (1).¹
- II.—a, *maculatus* (14); b, *humilis* (16); c, *frontalis* (11), including *laevigaster* (12); d, *beccarii* (7), including *minimus* (13).
- III.—*spilodera* (20), including *aruensis* (17).
- IV.—a, *magnirostris* (9), including *kieri* (10); b, *nouhuysi* (2).
- V.—*perspicillatus* (4).
- VI.—*rufescens* (18).
- VII.—*papuensis* (5), including *bürgersi* (8).
- VIII.—*arfakianus* (19), including *olivaceus* (3).

¹ Figures in parentheses refer to the figures of Mathews' sequence (see p. 1).

In Australia the various species that may occur at one locality are always so different that they can be identified quite easily. Several New Guinea species, however, are very similar to each other. To facilitate the identification of such birds, I have prepared the following key which is partly based on the key published by Stresemann in 1923 (Arch. f. Naturgesch., LXXXIX, Heft 8, pp. 13-14).

KEY TO THE PAPUAN SPECIES OF *Sericornis*

- 1.—A distinct white spot on either side of the forehead..... *beccarii-cyclopum*.
Not so..... 2.
- 2.—No distinct black subterminal bar on tail..... 3.
A distinct black subterminal bar on tail..... 5.
- 3.—Entire lower mandible yellowish horn-colored..... *spilodera*.
Lower mandible partly or totally brownish or black..... 4.
- 4.—Larger (wing usually above 60), no whitish or pale gray tips on wing-coverts..... *nouhuysi*.
Smaller (wing 54-62), whitish or pale gray tips on wing-coverts. *virgatus*-group.
- 5.—Contains four species: *papuensis*, *rufescens*, *perspicillatus*, and *arfakianus*, which cannot safely be separated by key characters.
perspicillatus: sides of face orange-ochre, sharply contrasting with crown; crown and nape grayish green, back and rump brownish olive.
rufescens: under parts buffy; sides of head dull pale ochraceous; upper parts dull brownish olive; black tail-bar well developed; Arfak Mts. only.
papuensis: Very variable; bright colors; tail very brown, with broad black bar; large size (wing 53-61); sides of face mostly washed with brownish.
arfakianus: dull green above, greenish white below; sides of face grayish green; tail-bar indistinct; small (wing 48-56).

The habitat of the various species of this genus is not always the same. Of the six species that occur in New Guinea (omitting the little known *rufescens*), never more than three can be found at any one locality, because their vertical ranges are not identical. While in Australia all of the species occur in the lowlands, only one of the New Guinea species (*spilodera*) does so regularly. One other species (*beccarii*) has been found in the lowlands on the Aru Islands and in South New Guinea, but it is not known to descend below 400 m. in the rest of its New Guinea range. The data at hand seem to indicate that the vertical ranges of the various races of *beccarii* are rather different, being lower in the Arfak and Sepik Mts. and higher in the Weyland Mts. and Mamberano Mts. (Doormanpaad.) The same phenomenon can be observed in *perspicillatus* and *nouhuysi*; both of which have in southeast New Guinea a higher altitudinal distribution than in north New Guinea (Saruwaged Mts.).

Two of the species are definitely birds of the lower mountain forest,

arfakianus occurring between 800 m. and 1600 m. and *perspicillatus* a little higher, between 1400 m. and 2400 m. The remaining two species occur right up to the upper tree limit, but *nouhuysi* (1500–3700 m.) descends lower than *papuensis* (2000–3700 m.).

All the species are similar in their habits. They are usually found in the undergrowth or on small trees in the heavy forest. *S. spilodera* also ventures out into second growth and into the higher parts of trees, while *S. nouhuysi*, on the other hand, particularly likes the low plant growth of the forest floor.

Further details on the life history of the Australian species are given in Campbell's monographic review 'The genus *Sericornis* in Australia, with notes on four monotypic genera' (1935, Emu, XXXIV, pp. 249–274).

Sericornis citreogularis Gould

This is a well-defined species, but no reason exists to separate it generically. *S. frontalis* is probably the nearest relative of this species which lives in the semi-tropical woodlands of eastern Australia.

Sericornis citreogularis citreogularis Gould

Sericornis citreogularis GOULD, 1838, 'Synopsis Birds Austr.', pt. 4, Pl. LVIII, fig. 4.—New South Wales.

Sericornis lathami auctorum.—This name was based on the "Watling Drawing No. 180," which, according to Mathews, is indeterminable. I have not been able to investigate this matter.

Sericornis lathami intermedia MATHEWS, 1912 (Jan. 31st), Nov. Zool., XVIII, (1911), p. 354.—Blackall Range, south Queensland. [Type (♀) examined.]

RANGE.—Eastern Victoria, eastern New South Wales, and southeast Queensland, northward about to the 25° S. According to Campbell no actual records exist from south of Bulli (N.S.W.) and from north of Moreton Bay. There appears to be a decided break between the range of this subspecies and that of *cairnsi* which seems to be restricted to the wet belt in the Cairns district.

Sericornis citreogularis cairnsi Mathews

Sericornis lathami cairnsi MATHEWS, 1912, Nov. Zool., XVIII (1911), p. 354.—Kuranda (near Cairns), north Queensland. [Type (♀) examined.]

CHARACTERS.—Weak form. Black of ear-coverts, lores and forehead deeper and more extensive; crown darker and less olivaceous; back darker and duller olivaceous, lacking the warmer brownish tone of typical birds; sides of breast and flanks average more cinnamon, less rufous, and the throat a deeper yellow.

RANGE.—Apparently restricted to the wet Cairns district of north Queensland. The species seems to be absent from Cape York.

		WING	TAIL	TARSUS	WING
<i>citreogularis</i>	♂	66-71 (68.4)	54-57 (55.5)	28	♀ 64-70 (66.9)
<i>cairnsi</i>	♂	67-71 (68.6)	53-54 (53.7)	27	♀ 63, 64

MATERIAL EXAMINED.—*S. c. citreogularis*: Gosford and Ourimbah, N.S.W., 3 ♂; Bulli Pass., N.S.W., 1 ♀; Blue Mts., N.S.W., 1 ♀; Tweed River, N.S.W., 2 ♂; Richmond River, 2 ♀; Bunya Mts., south Queensland, 1 ♀; Blackall Range, south Queensland, 1 ♂, 1 ♀.—*S. c. cairnsi*: Tolga, north Queensland, 3 ♂; Kuranda and Barron River, 2 ♂.

Superspecies *Sericornis frontalis*

This superspecies comprises a number of forms which are still insufficiently understood. Although I have examined a great deal of material, I have been unable to clarify the specific status (and the value of the many described subspecies) of some of the "species" of this group. There are three reasons for this. One is the great individual variation in this group. I have seen, in some of the populations, specimens with tailbands and without such, specimens with spots on the throat and without such, and whatever other differences are supposed to distinguish the various species and subspecies. The second reason is the decided geographical variation in these species. Hardly two series from any two localities are quite alike. And the third reason is the manner of distribution, which seems to be determined largely by rainfall and vegetation. We thus find different subspecies in the mountains than in the lowlands, and on the coast different ones from those inland. It has therefore been possible only to make a preliminary survey and grouping of the related species and forms. A more detailed revision will be undertaken at a later occasion.

I recognize four species in the superspecies *frontalis*: *maculatus*, *humilis*, *frontalis*, and *beccarii*.

Sericornis maculatus Gould

RANGE.—West, southwest and south Australia and off lying islands, such as Dick Hartog Islands and Kangaroo Island.

This "species" apparently intergrades with *frontalis* in the region of Cape Jervis and Mt. Lofty.

Sericornis humilis Gould

RANGE.—Tasmania and islands of Bass Straits.

This "species" is clearly a representative of *frontalis*, with which it is connected by the various races on the islands of Bass Straits and south-

ern Victoria. In fact, several of the races of *humilis* were originally described as subspecies of *frontalis*. I fail to understand how Campbell can say (1935, Emu, p. 267): "They cannot in any way be considered as links between the two."

Sericornis frontalis Vigors and Horsfield

RANGE.—Southeastern South Australia, Victoria, New South Wales and Queensland north to the Herberton district. Apparently never occurring west of the 25° Isohyograph, although of spotty distribution even in regions of sufficient rainfall, particularly in the northern part of its range.

Shows considerable geographical variation in the various parts of its range. The throat shows much spotting in the Mt. Lofty region, Southern Australia (*rosinae* Mathews), and in southern Victoria, less in New South Wales and almost none in Queensland (*laevigaster* and *herbertoni*). The tail shows no sign of a black bar in the Mt. Lofty region nor in most specimens from Victoria. There is a faint indication of a black bar in most typical *frontalis* (Sydney, N.S.W.), which becomes more pronounced as we go north in the following series of forms: *tweedi* Mathews (Richmond and Tweed Rivers), *laevigaster* (southern Queensland, Blackall Range, Brisbane district, and upper Dawson River) and *herbertoni* (Herberton plateau, north Queensland). The white superciliary line is sometimes continued toward the nape (*herbertoni*), or it stops immediately back of the eye; the ear-coverts in the adult males are either blackish as the lores (*laevigaster* and *herbertoni*) or grayish brown.

It is quite impossible to regard *laevigaster* as a distinct species from *frontalis*. They are perfectly connected by intermediates; in fact, *laevigaster* itself is nothing but an intermediate between *frontalis* and *herbertoni*.

I do not believe that *Sericornis tyrannulus* DeVis is a synonym of *S. f. laevigaster*. The description does not fit the young of *laevigaster*, and the type locality (Charleville) is in a dry belt, where no members of the genus *Sericornis* occur (but see Campbell, 1935, Emu, p. 256).

I have not seen enough material from southern New South Wales, Victoria and eastern South Australia to make any definite statements about the distribution, validity and characters of the races: *frontalis*, *longirostris*, *harterti*, *rosinae* and *wyldei*. I have contented myself with a short characterization of the more northern forms: *tweedi*, *laevigaster* and *herbertoni*.

Sericornis frontalis tweedi Mathews

Sericornis laevigaster tweedi MATHEWS, 1922, 'Birds Australia,' X, p. 16.—Tweed River, northeastern New South Wales.

CHARACTERS.—Very similar to *S. f. frontalis* Vigors and Horsfield, but spotting on throat reduced or absent; with a definite black bar across the tail, which is either lacking or barely indicated in *frontalis*; general coloration of upper and under parts and pattern of the face variable and apparently as in *frontalis*.

RANGE.—Northeastern New South Wales from the Richmond River northward, and southeastern Queensland north to the Blackall Range, where it intergrades with *laevigaster*.

I have not examined enough material to work out the exact range of this subspecies as compared with typical *frontalis*. There is, however, no doubt that the blackish tail-band is more conspicuous in birds from northeastern New South Wales than in those from Sydney and farther south.

Sericornis frontalis laevigaster Gould

Sericornis laevigaster GOULD, 1847, Proc. Zool. Soc. London, p. 3.—Near Expedition Range, head of Dawson River, at about 149° E. and 25° S., 480 mi. from Brisbane (according to Campbell, *loc. cit.*, p. 255).

The type in the Acad. of Natural Sciences of Philadelphia is the only specimen of this subspecies examined by me. It has the black bar across the tail and the whitish tips very well developed, almost as well as the specimens of *herbertoni*. A female from the Blackall Range (E. Ashby coll.), which has always been listed as *laevigaster*, has the black-brown tail-bar not as wide, and only narrow whitish margins on the outermost tail-feathers. This specimen is clearly intermediate between "*tweedi* Mathews" and *laevigaster*.

To Campbell we owe the information that the type of *laevigaster* was collected in the eastern rain belt, less than 200 miles from the coast, and not in "the interior of Australia near the Gulf of Carpenteria," as stated by Gould, Mathews and other Australian authors.

Sericornis frontalis herbertoni Mathews

Sericornis parvula herbertoni MATHEWS, 1912, Nov. Zool., XVIII (1911), p. 355.—Herberton, north Queensland. [Type examined.]

CHARACTERS.—Very pronounced race. The four outer tail-feathers are broadly tipped with white; the subterminal black bar is very broad and present in all the tail-feathers, except the central pair; the superciliary line is broad, clearly defined and continued beyond the eye to the nape; the upper parts are lighter than in *frontalis* and less brownish, more olivaceous-cinnamon on back, rump and tail; the ear-coverts are very dark; the upper throat with no or few spots.

The female differs from the male, as usual, by the brownish instead of black

lores and by the paler yellow of the under parts; the only female examined (the type) also differs from the only male examined (from Calluingal, central Queensland) by a slightly more brownish coloration of crown, back and tail.

	WING	TAIL	CULMEN	TARSUS
♂ ad.	59	50	15	21
♀ (type)	57.5	48.5	15	19

RANGE.—Apparently restricted to the Herberton district in northern Queensland; recorded from Herberton, Kirrima and Calluingal.

Sericornis beccarii Salvadori

RANGE.—Tropical lowlands of the Cape York Peninsula (Queensland), the Aru Islands and south New Guinea, and also upper tropical forest in the mountains of north central New Guinea.

Although this species is obviously a geographical representative of *Sericornis frontalis* of Eastern Australia, it seems preferable to keep it as a distinct species, since it is characterized in all its forms by a specific and rather constant color pattern. The tail is without a black bar; there are conspicuous white supraloral spots, which are not joined with the short superciliary; the feathers on the lower circumference of the eye are white; the upper wing-coverts and the alula are blackish with broad white tips.

Within the species we can distinguish three representative groups of subspecies, which I am naming after the oldest subspecies of each group: *beccarii*, *cyclopum* and *virgatus*-groups.

beccarii-group

To this group I refer the forms that occur in the tropical lowlands of the Cape York Peninsula, Aru Islands and south New Guinea. Characterized (except *dubius*) by the small amount of olivaceous wash underneath, by small size, by the distinct whitish throat, by the darkness of primary- and upper wing-coverts, and in the males by the large size of the white frontal spots and the large extent of the black marks on forehead and lores.

Sericornis beccarii minimus Gould

Sericornis minimus GOULD, 1875 (Dec. 1st), 'Birds New Guinea,' pt. I.—Cape York, North Queensland.

Sericornis brunneopygius MASTERS, 1876 (Feb.), Proc. Linn. Soc. New South Wales, I, p. 53.—Cape York.

Sericornis minimus yorki MATHEWS, 1922, 'Birds Australia,' X, p. 19.—Piara Scrubs, Cape York [type examined].

ADULT MALE.—Pale form. Crown cinnamomeous, lores dark, but not quite

black; blackish line surrounding the white supraloral spots narrow; throat clear white or with little spotting; belly yellow, sides of breast and flanks with inconspicuous pale grayish-brown streaks.

Wing, ♂ 57, 57.5, 59, 59, 59.5, ♀ 54, 54, 55; tail, ♂ 40, 42, 43, 44, 44, ♀ 39.5, 40, 40; culmen, ♂ 15.2-16.0, ♀ 14.2-15.1; tarsus, ♂ 19-21, ♀ 18.5-19.

RANGE.—Cape York, northern part.

Most specimens of this species have the back much more greenish than the crown; the type, however, belongs to a phase with a more brownish back. Nestlings have a soft, downy plumage, but are otherwise very similar to adults. They do not have any rufous wash on the under parts, and the pattern on wing and head is approximately as in the adults. Back and rump are slightly more rufous brown.

Sericornis beccarii *dubius*, new subspecies

TYPE.—No. 450834, Amer. Mus. Nat. Hist. (Rothschild collection); ♂ ad.; "Cape York," N. Queensland; July 9, 1898.—A. S. Meek.

Adult male similar to *S. b. minimus*, but more brownish throughout, and with the facial pattern less defined. On both sides of the forehead a buffy-white spot; lower eyelid and short superciliary stripe buffy; rest of face cinnamomeous; upper throat whitish with a few brownish spots; lower throat and breast pale ochraceous; abdomen whitish with a yellowish-buff wash; flanks and under tail-coverts darker, grayish ochraceous; upper parts similar to that of the brownish phase of *minimus*, but still more brownish on back; wing brownish, medium and greater upper wing-coverts, alula and primary coverts blackish brown, wing-coverts with narrow whitish tips.

Female similar to male but still more brownish. Upper throat, frontal spot, lower eyelid and superciliary washed with buffy cinnamome.

Wing, 2♂ 60, 60, ♀ 55; tail, 2♂ 43, 44, ♀ 40; tarsus, 2♂ 21, 21, ♀ 20.

Two specimens from the Watson River in Northern Queensland have the black pattern on the forehead much reduced and the white washed with buffy. On the under parts, also, they have a slight buffy wash on breast and flanks. These specimens probably lead over to *dubius*. All three specimens of *dubius* are perfectly adult, and since nestlings of *minimus* already show all the typical characters of that subspecies, it cannot be argued that *dubius* is the young of *minimus*. The typical series was collected by Meek in July, 1898, all three specimens probably in the same place, but the label does not indicate in what section of the Cape York Peninsula. The extensive material in the Mathews collection from the northern tip of Cape York (8 ♂, 3 ♀, 3 (?) from Cable Station, 3 ♂, 3 ♀, 1 (?) from Utingu, and 3 ♂, 1 ♀ from Piara Scrubs) are all very similar and agree with the plate of Gould's *minimus*. The description of *brunneopygialis* also clearly refers to the bird from the north tip of Cape York. *S. b. dubius* is much too similar to *minimus*

to be regarded anything but a subspecies. The existence of somewhat intermediate specimens from Watson River indicates that the type series of *dubius* may have been collected in the southern portion of Cape York Peninsula. The remarks of D. F. Thomson (1935, 'Birds of Cape York Peninsula,' p. 61) confirm this conclusion. Meek collected his specimens probably somewhere near Princess Charlotte Bay.

Sericornis beccarii beccarii Salvadori

Sericornis beccarii SALVADORI, 1874, Ann. Mus. Civ. Genova, VI, p. 79.—Wokan, Aru Islands.

ADULT MALE.—Similar to *minimus* Gould, but darker throughout; crown a darker brown, many feathers with blackish edges; back variable as in *minimus*, sometimes more brownish, sometimes more olivaceous, but averaging distinctly darker; lores black; blackish line surrounding the white supraloral spots broad; throat white, with the black spots usually quite pronounced; belly yellowish; breast and flanks with conspicuous grayish-olivaceous streaks; wings and tail of a warmer, more rufous brown; white tips on upper wing-coverts smaller.

Wing, ♂ 59, 59, 60.5, ♀ 52.5, 53; tail, ♂ 42, 43, 43.5, ♀ 38, 39; tarsus, ♂ 20–21, ♀ 18.

RANGE.—Aru Islands.

Sericornis beccarii randi, new subspecies

TYPE.—No. 422041, Amer. Mus. Nat. Hist.; sex ? [= ♂ ad.]; Wuroi, Oriomo River, Western Division of Papua; Jan. 25, 1936; R. Archbold and A. Rand.

ADULT MALE.—Similar to *beccarii*, but more greenish; crown dark hair-brown, most feathers with blackish edges; back greenish olivaceous; lores black; blackish line surrounding the white supraloral spots broad; ear-coverts olivaceous brown; upper throat white with indistinct black longitudinal streaks; breast and belly pale yellow; breast with conspicuous gray streaks; flanks olivaceous; under tail-coverts yellowish, not rust-colored as in *beccarii*; thighs blackish brown; tail cinnamomeous brown; edges of wing-feathers olivaceous; outer upper wing-coverts deep black with broad white tips. Differs from *minimus* mainly by the coloration of head, throat and breast, and from *beccarii* by that of wing, tail and under tail-coverts.

RANGE.—Only known from the type locality in the lowlands of South New Guinea.

	WING	TAIL	CULMEN	TARSUS
2 ♂	57.5, 58.5	42, 45	14, 16	20, 20
1 ♀	55	41	15.5	18

cyclopum-group

The three forms *minimus*, *beccarii* and *randi* are rather closely related as is shown by their similarity of coloration and by their distribution in tropical lowlands. In western New Guinea, however, we find

some races of this species which live in the hills at altitudes of about 600 m. to 1400 m., and which have a somewhat different type of coloration, particularly on the under parts, which are very similar in the three following forms. The differences between them relate mostly to the color of the face in which respect *cyclopum* is intermediate between *weylandi* and *wondiwoi*.

Sericornis beccarii cyclopum Hartert

Sericornis magnirostris cyclopum HARTERT, 1930, Nov. Zool., XXXVI, p. 83.—Cyclop Mountains.

ADULT MALE.—A dark subspecies, with the brown crown contrasting with the dull grayish-olive back; rump with a rufous tinge; white supraloral spots and eye spots small; blackish line surrounding the white supraloral spots narrow; lores brownish black; ear-coverts cinnamomeous; throat white, mottled with grayish; a broad gray-green breast-band, separating the white throat from the pale greenish-yellow belly; flanks grayish olivaceous; thighs cinnamon; tail-feathers rufous brown; edges of wing-feathers olivaceous with a brown wash; alula and outer upper wing-coverts brownish black with narrow white tips.

Wing, ♂ 58, 60.5, ♀ 54.5; tail, ♂ 40, 42, ♀ 38.5; culmen, 16; tarsus, 19–21.

RANGE.—Cyclop Mts., northern New Guinea.

Sericornis beccarii weylandi, new subspecies

TYPE.—No. 301998, Amer. Mus. Nat. Hist.; ♂ ad.; Mt. Kunupi, Weyland Mts.; Sept. 23, 1931; Georg Stein.

ADULT MALE.—Similar to *S. b. cyclopum*, but coloration of face different and more rufous throughout. The white supraloral spots are larger, the black line surrounding them is broader, the lores are apparently more blackish; the back, and the inner and outer edges of the wing-feathers are more rufous; the flanks and under tail-coverts are washed with rufous; the upper wing-coverts are more clearly black.

Differs from *randi* by the paler greenish-yellow coloration of the belly, by the presence of a distinct grayish band across the breast, which is dissolved into longitudinal streaks in *randi*, and by the presence of rufous colors on the tail, the under tail-coverts, the inner and outer edges of the wing-feathers and on the rump and lower back; resembles *randi* in the coloration of the face. The color of the feet in *weylandi* is apparently also much darker than in *randi*, where it is pinkish white.

Wing, ♂ 63, 63, 63, 64, ♀ 58.5, 59, 60; tail, ♂ 42, 43, 45, 46, ♀ 41, 41.5, 44.

RANGE.—Weyland Mts. and also probably mountains on the upper Mamberano (see Hartert, 1932, Nova Guinea, XV, p. 461).

Sericornis beccarii wondiwoi, new subspecies

TYPE.—No. 293861, Amer. Mus. Nat. Hist.; ♂ ad.; Wondiwoi Mts., northwest New Guinea (Wandammen district); July 9, 1928; Ernst Mayr.

ADULT MALE.—Similar to *cyclopum* and *weylandi* in the coloration of the under parts; the middle of the belly is pale yellowish and a grayish-green band runs across the breast; the throat is whitish, indistinctly mottled with gray, and the flanks are olivaceous. It differs, however, from the two other forms by the smaller size of the

white supraloral spots and by the absence or inconspicuousness of the black line surrounding them, by the cinnamon-brown, instead of blackish coloration of lores and cheeks, and by the smaller size of the white spots above and below the eye. The remainder of the upper parts is very much like in *cyclopum*, except that the crown averages more olivaceous, less brownish and tail and wings are definitely more olivaceous; the inner edge of the wing-feathers is light buffy.

Wing, ♂ 59, 61, 63, ♀ 58; tail, ♂ 41, 45, 45, ♀ 42.

RANGE.—Only known from the type locality at 1200 to 1800 meters.

The particular interest of this form lies in the fact that it definitely approaches the *Sericornis virgatus* group by the coloration of its face.

virgatus-group

In this group I include three subspecies, which have in common the essential color characters of *beccarii* on body and wings, but differ from the other forms of *beccarii* by the absence of black markings on the head and by the reduction or absence of the white marks on the forehead and around the eyes. One of these forms (*imitator*) has in the past been considered the same as *Ser. nouhuysi cantans* and the other two have been considered subspecies of *nouhuysi*. In my opinion they are, however, more closely related to *beccarii*, as evidenced by their smaller size, coloration of wing and under parts, and lower vertical range. The three forms: *imitator*, *jobiensis* and *virgatus* are probably not more closely related to each other than to the other forms of the species. It is for purely practical reasons (similarity!) that I have combined them in one group.

Sericornis beccarii imitator, new subspecies

No. 450828, Amer. Mus. Nat. Hist. (Rothschild collection); ♂ ad.; Siwi, Arfak Mts.; April 26, 1928; Ernst Mayr.

ADULT MALE.—Middle of throat whitish, usually in clear contrast with the cinnamomeous buffy cheeks and ear-coverts; breast washed with grayish olivaceous; middle of belly light, frequently with a distinct yellowish wash; under tail-coverts olivaceous or just with a slight rufous wash. Upper parts, particularly the back usually distinctly greenish, not rufous olivaceous; forehead without black markings, white supraloral spots either missing or ill defined; upper wing-coverts dark, strongly contrasting with the rest of the wing; tips of alula, and of greater and medium upper wing-coverts white or whitish.

Bill reddish horn-colored, iris usually red or red-brown, not usually brown or red-brown as in *cantans*; feet pale grayish pink.

The differences between this form and *cantans* are described on p. 18.

Wing, ♂ 60, 61.5, 62, 62, 62.5, ♀ 55, 55.5, 58, 59; tail, ♂ 44, 44, 44, 46, 46, ♀ 38, 39, 39.5, 40; culmen ♂ 15–16.5, ♀ 15–16; tarsus, ♂ 20–22, ♀ 19–21.

RANGE.—Arfak Mountains from 800 m. to 1400 m.

Hartert (1930, Nov. Zool., XXXVI, p. 82) has already called attention to the fact that the series of specimens of *Sericornis "arfakiana"*

auctorum collected by me seems to belong to two species. On second thought, however, he treated them as color phases of one species. I entirely disagree with this point of view. In the field I considered these birds as belonging to two species and I marked them as such on some of the labels. The study of the skins has confirmed this opinion, although I admit that there are a few intermediate specimens which are difficult to assign specifically. Typical specimens of both species are, however, always well distinguishable. *Sericornis beccarii imitator* has been collected only at altitudes of 800 m. to 1400 m. In general coloration it greatly resembles *Sericornis beccarii wondiwoi*, which, however, has a different coloration of the face.

The other Arfak species, most specimens of which were collected at higher altitudes (1400 m. to 2000 m., rarely down to 1200 m.), appears to be a geographical representative of *Sericornis nouhuysi*. I have examined practically all the cotypes of *Sericornis arfakiana* Salv. (= *cantans* Mayr) in the museums of Genova, Leiden and Tring, and found all of them to belong to the species which lives in the higher altitude. There is the possibility that the two species are only altitudinal subspecies. This point of view is backed up by the fact that the forms have almost the same measurements, and that a few specimens are intermediate in their characters to such a degree that it is almost impossible to identify them. Against the theory of altitudinal races speaks the fact that the vertical ranges of *imitator* and *cantans* seems to overlap between 1200 m. and 1400 m., and also the fact that typical specimens of either form appear to be clearly representative of two distinct species: *beccarii* and *nouhuysi*. More field work and collecting will be needed to determine the exact status of the two forms, but *imitator* is different enough to be described, no matter whether one considers it as specifically or only as subspecifically different from *cantans*.

Sericornis beccarii jobiensis Stresemann and Paludan

Sericornis magnirostris jobiensis STRESEMANN AND PALUDAN, 1932, Nov. Zool., XXXVIII, p. 230.—Japen Island, Geelvink Bay.

ADULT MALE.—Similar to *Sericornis beccarii imitator*, but forehead and face darker, more ochraceous cinnamon, less sand-colored; the upper parts also darker, more dark green, less olivaceous; general coloration of face and upper wing-coverts very similar; on the under parts *jobiensis* appears to be lighter than *imitator*.

Range.—Japen (=Jobi) Island Geelvink Bay.

Sericornis beccarii virgatus (Reichenow)

Crateroscelis virgata REICHENOW, 1915, Jour. f. Ornith., LXIII, p. 128.—Middle Sepik River (type from the Maeanderberg).

ADULT MALE.—Similar to *jobiensis*, but more brownish throughout, particularly on wings and head; extent of white tips on upper wing-coverts variable; under parts, particularly throat and lower belly, very light; under tail-coverts olivaceous with a slight rufous tinge; forehead, lores and sides of head rufous with an indication of a buffy supraloral spot.

RANGE.—Maeanderberg (middle Sepik) at 600 m. (see also Stresemann, 1923, Arch. f. Naturgesch., LXXXIX A, fasc. 8, p. 13.)

Sericornis spilodera

This species has for a long time been separated in a monotypic genus: *Aethomyias*. There is some justification for this action. The bill of *spilodera* is reminiscent of that of some flycatchers; it is broad and has an inflated lower mandible and the rictal bristles are particularly well developed; the tarsus on the other hand is rather short. The style of coloration, however, suggests that of *Sericornis maculatus*. As in that species, the spots on the throat are well pronounced in some subspecies and reduced or missing in others. It seems best to include *spilodera* in the genus *Sericornis*, as has been suggested by Meise (1931, Nov. Zool., XXXVI, p. 319).

Sericornis spilodera spilodera (Gray)

Entomophila ? *spilodera* GRAY, 1859, Proc. Zool. Soc. London, p. 155.—Dorey, northwest New Guinea.

Aethomyias nigrifrons REICHENOW, 1915, Jour. f. Ornith., LXIII, p. 124.—Maeanderberg, Sepik region.

Gerygone stictilaema REICHENOW, 1917, Jour. f. Ornith., LXV, p. 514.—Maeanderberg, Sepik region.

ADULT MALE.—Crown sooty black; ear-coverts dull fuscous; under parts light, with the spotting on the throat well developed; abdomen, flanks and under tail-coverts pale yellowish white; back dull gray-green; tail distinctly rufous brown, tail-feathers frequently with a subterminal black bar.

Wing, ♂ 58–61, ♀ 56–61; tail, ♂ 42–46, ♀ 39–44; tarsus, ♂ 17–18.

RANGE.—Japen (= Jobi) Island, northwestern and northern New Guinea, eastward as far as Astrolabe Bay.

The populations on the Sepik, on Astrolabe Bay and on the Huon Peninsula tend progressively toward *guttata*. The name *nigrifrons* is available for those who want to separate this intermediate population.

Sericornis spilodera guttatus (Sharpe)

Aethomyias guttata SHARPE, 1882, Jour. Linn. Soc. London, Zool., XVI, p. 432.—Southeast New Guinea.

Crown greenish or, particularly toward the forehead, rufous brown; feathers of the crown frequently tipped with black; ear-coverts brown or grayish brown; under

parts rather dark, throat with large spots; middle of belly yellowish, flanks olivaceous; back light green; tail rufous brown, most feathers with a distinct sub-terminal bar.

Wing, ♂ 59–64 (61.2), ♀ 56–60 (58.0); tail, ♂ 45–49 (47.3), ♀ 46–47; tarsus, 18–19.

RANGE.—Eastern New Guinea, westward in the north to the Huon Peninsula, in the south to the Angabunga River.

Sericornis spilodera wuroi, new subspecies

TYPE.—No. 422042, Amer. Mus. Nat. Hist.; ♂ ad.; Wuroi, Oriomo River, south New Guinea; February 5, 1934; R. Archbold and A. L. Rand.

DIAGNOSIS.—Similar to *S. s. guttatus*, but crown more greenish, less rufous; ear-coverts more grayish; spots on throat averaging smaller; abdomen and flanks bright greenish yellow, not olivaceous; back very green; tail olivaceous brown; upper tail-coverts olivaceous, not rufous; under wing-coverts much lighter, less grayish. The coloration of crown, flanks and tail clearly separate this bird from *guttatus*.

Wing, ♂ 60, 61, ♀ 56, 56; tail, ♂ 46, 46, ♀ 42; tarsus, ♂ 18, 19, ♀ 17, 17.5.

RANGE.—Lowlands of south New Guinea (Oriomo River).

Sericornis spilodera granti (Hartert)

Aethomyias spilodera granti HARTERT, 1930, Nov. Zool., XXXVI, p. 85.—Snow Mts. [= Utakwa River].

Crown rather brownish, feathers without conspicuous black tips; ear-coverts rufous brown; under parts light, spots on throat small; lower belly and flanks pale yellow; back olivaceous; tail and upper tail-coverts rufous; no distinct black sub-terminal bars; smaller than *guttatus*.

Wing, ♂ 58–61, ♀ 57; tail, ♂ 43–45, ♀ 41; tarsus, ♂ 18.5–19.5, ♀ 18.

RANGE.—Nassau Range, Snow Mts.

This race is, as Hartert (*loc. cit.*) says, rather similar to *S. s. guttatus*, while on the Weyland Mts. a population occurs which is indistinguishable from typical *spilodera*.

Sericornis spilodera ferrugineus Stresemann and Paludan

Sericornis spilodera ferruginea STRESEMANN AND PALUDAN, 1932, Ornith. Monatsber., XL, p. 16.—Waigeu.

Crown rufous olivaceous; forehead rufescent; ear-coverts dull grayish rufous; under parts very light, spotting on throat almost obsolete, pale gray, not blackish; abdomen and flanks yellowish; back greenish, upper tail-coverts and tail rufous brown; some tail-feathers with indistinct black subterminal bars.

Wing, ♂ 58–59, ♀ 53–55 mm.

RANGE.—Waigeu Island.

Sericornis spilodera aruensis Ogilvie-Grant

Sericornis aruensis OGILVIE-GRANT, 1911, Bull. Brit. Orn. Club, XXIX, p. 29.—Wokan, Aru Islands.

Crown rufous olivaceous, forehead paler and more buffy; ear-coverts pale buffy-gray; back bright greenish olivaceous; tail rufous; throat whitish, without any blackish or gray spots; lower belly yellowish.

Male, wing, 61; tail, 46; tarsus, 18.

RANGE.—Aru Islands.

A single specimen of this form in the Rothschild collection has already been labeled *Aethomyias* by Dr. Hartert. Although the Aru Island form is entirely unspotted on the under parts, I do not hesitate to regard it a subspecies of *spilodera*, since it agrees with that species in all of the other characters and since the Waigeu form, *ferrugineus*, represents an exactly intermediate condition.

Sericornis magnirostris

A dull and rather pale species. "It is a species of the eastern coast, . . . inhabits all the brush or jungle, . . . travels into the outlying eucalyptus forest as well, so that its range may be said to be continuous." (Campbell.) The species is apparently rather rare in the southern part of its range. The Mathews collection contains only one specimen from Victoria, and two from New South Wales (except for a series from near the Queensland border).

Sericornis magnirostris magnirostris (Gould)

Acanthiza magnirostra GOULD, 1838, Synopsis Birds Austr., pt. 4, Pl. LX.—Sydney.

Sericornis magnirostris howei MATHEWS, 1912, Nov. Zool., XVIII (1911), p. 355.—Gippsland, Victoria.

Sericornis magnirostris bunya MATHEWS, 1920, Bull. Brit. Orn. Club, XL, p. 106.—Bunya Mts., south Queensland.

MEASUREMENTS.—Wing, Victoria (type of *howei*), 55; New South Wales (Sydney district), ♂ 54, 57; New South Wales (Richmond-Tweed Rivers), ♂ 56, 58, 58, ♀ 54, 54; South and central Queensland (Bunya Mts., Gracemere), ♂ 52, 55, ♀ 49.

RANGE.—From Victoria (Western Port and Gippsland) northward through New South Wales to central Queensland (Gracemere and MacKay).

It is possible that this race can be still further subdivided along the lines suggested by Mathews, but the material examined by me is insufficient to settle this point. A single specimen from Southern Victoria (type of *howei*) differs as follows from two specimens from Gosford, N.S.W. The head is darker and definitely browner; the under parts are darker, with the throat deeper buff and the flanks more greenish; wings and tail are darker brown. The race, *howei* Mathews, must be recognized, if additional Victoria specimens show the same characters.

A series of specimens collected in northern New South Wales, at Tweed and Richmond Rivers, is lighter and more grayish on the back. Still a little paler underneath are two birds from Gracemere and Mackay, central Queensland. A single bird from the Bunya Mts. (south Queensland) is still paler, less brownish. This specimen shows practically no trace of brownish on crown, wings and tail, and no buffy coloration on throat and under tail-coverts. The back is grayish green. This is the type of *Sericornis magnirostris bunya* Mathews.

Sericornis magnirostris viridior Mathews

Sericornis magnirostris viridior MATHEWS, 1912, Nov. Zool., XVIII (1911), p. 355.—Atherton Scrub, N. Queensland.

Sericornis magnirostris keri MATHEWS, 1920, Bull. Brit. Orn. Club, XL, p. 106.—Bellender Ker Range.

CHARACTERS.—Similar to *magnirostris*, but darker and duller; back not pure green, but with a slight or strong brownish wash; back not contrasting with the brownish crown and upper tail-coverts; under parts more washed with olive-buff, flanks olivaceous; under tail-coverts deeper ochraceous; wings and tail more brownish.

MEASUREMENTS.—Wing, highlands of Bellender Ker district, ♂ 56, 58, 58, 58, 60, 61, ♀ 53, 55, 56, 58; lowlands of Cairns district, ♂ 54, 56, 57, 58, ♀ 54.

RANGE.—Lowlands and highlands of north Queensland. Specimens examined from Bellender Ker, Bartle Frere, Atherton Scrub, Tolga, Barron River, Kuranda, Johnston River, and Cedar Bay.

There is considerable variation in this series. Birds from the lowlands are paler and more grayish than specimens from the hills, thus approaching typical *magnirostris*. Some of these birds are quite pale underneath, others distinctly washed with greenish buff. Birds from Atherton Scrub and Bellender Ker are surprisingly similar to the type of *howei* (Victoria), but differ by the brownish, not green, back. The type of *keri*, although belonging to this species, is a very unusual specimen. It is very dark on the under parts, forehead and lores, and measures larger than other birds from the same locality (wing 61, tail 48).

This species does NOT occur on Cape York.

Sericornis nouhuysi

Under this name I combine a number of high mountain forms, which had been called *arfakianus* for a long period, until I showed in 1930 (Ornith. Monatsber., XXXVIII, p. 177) that the name *Sericornis arfakianus* was preoccupied by the name *Gerygone* (= *Sericornis*) *arfakiana*. At the same time (1930, Nov. Zool., XXXVI, pp. 82–83)

Dr. Hartert proposed to include these birds with the Australian species *Sericornis magnirostris*, a proposal which has been accepted by myself and other recent workers. A renewed study of the situation has, however, led me to the conclusion that it is far better to keep the Australian and the New Guinea birds specifically separate, and to employ as the specific name of the New Guinea birds the oldest available name, which is *nouhuysi* van Oort. I have several reasons for this grouping. The Australian birds (*magnirostris*) and the New Guinea birds (*nouhuysi*) form two rather uniform groups. Their reputed similarity is mainly caused by the absence of any distinctive feature in the coloration of either group of these plain looking olivaceous birds. Furthermore there seems to be no advantage in uniting two widely separated groups in a genus which has so many similar species, as has the genus *Sericornis* in New Guinea. There is also an ecological difference between *magnirostris*, which lives in the comparatively drier subtropical forest of Australia (near sea level), and *nouhuysi*, which is restricted to the wettest high mountain forest and reaches its optimum occurrence above 2000 meters.

***Sericornis nouhuysi cantans* Mayr**

Sericornis magnirostris cantans MAYR, 1930, Ornith. Monatsber., XXXVIII, p. 177.—New name for

Sericornis arfakiana SALVADORI, 1876, Ann. Mus. Civ. Genoa, VII, p. 962.—Arfak Mountains. Preoccupied by *Gerygone* (= *Sericornis*) *arfakiana* Salvadori, ibid., p. 960.

The essential characters of this form can be most clearly described by a comparison of this form with those other forms of the genus that are most similar to it.

Similar to *S. nouhuysi oorti*, but much paler underneath with very little greenish-olivaceous wash; the rufous wash of the throat extending farther down on the breast; upper parts, including wing and tail, more rufous brown; upper wing-coverts with definite buffy-gray tips; of very much smaller size; bill narrower. Differs from *nouhuysi* by the lack of the conspicuous rufous wash of the entire under parts.

Similar to *Sericornis beccarii imitator*, but throat and breast washed with rufous, contrasting with the grayish-buff abdomen; under tail-coverts rufous; forehead, lores and feathers around the eye strongly washed with rufous; tail and crown almost always conspicuously washed with rufous; upper wing-coverts only slightly darker than the rest of the wing; light tips on alula, greater and medium upper wing-coverts narrower and buffy gray, not white; bill usually blackish; feet darker, more brownish, less pink.

Wing, ♂ 61.5, 62, 63, ♀ 57, 59, 61, 63; tail, ♂ 43, 44, 46, ♀ 41, 41, 43.5, 46, 47; culmen, ♂ —, ♀ 15.5, 15.5, 16, 16; tarsus, ♂ 21, 21, ♀ 20.5, 21, 21.5, 22.

RANGE.—Arfak Mountains above 1600 m., rarely down to 1200 m.

The status of this form in relation to *Sericornis beccarii imitator* has been discussed on p. 13.

Sericornis nouhuysi nouhuysi van Oort

Sericornis arfakiana nouhuysi VAN OORT, 1909, Nova Guinea, IX (Zool.), p. 90.—Hellwig Mountains, Oranje Range.

Entire upper parts rufous brown, more rufous on the rump and with an olivaceous wash on nape and upper back; wings and tail brown, upper wing-coverts and alula dark brown, obscurely edged and tipped with buffy rufous; forehead, lores, chin and surroundings of eyes much paler, rufous buff; breast and abdomen pale brown, with a grayish-olive wash; crissum, thighs and under tail-coverts washed with rufous. Iris dark brown, bill black, feet dark brown.

Mt. Goliath: wing, ♂ 62–67 (64.5), ♀ 60–63 (61.6); tail, ♂ 44–45, ♀ 40–45; culmen, 16; tarsus, 22–23.

Weyland Mts.: wing, ♂ 64–68 (66.8), ♀ 63–65 (63.7); tail, ♂ 44–47 (45.7), ♀ 43–44; culmen, 16; tarsus, 22–23.

RANGE.—Weyland Mts., Nassau and Oranje Ranges.

Sericornis nouhuysi stresemanni Mayr

Sericornis magnirostris stresemanni MAYR, 1930, Ornith. Monatsber., XXXVIII, p. 177.—New name for

Sericornis arfakiana rufescens STRESEMANN, 1921, Anzeiger Ornith. Ges. Bayern, I, No. 5, p. 33.—Schraderberg, Sepik Mts. Preoccupied by *Gerygone*? (= *Sericornis*) *rufescens* SALVADORI, 1876, Ann. Mus. Civ. Genova, VII, p. 961.—Hatam, Arfak Mts.

DIAGNOSIS.—Intermediate between *nouhuysi* and *oorti*. Under parts rather similar to *oorti*, but back, throat and sides of head distinctly more rufous brown.

RANGE.—Only known from the type locality (Schraderberg, 2000 meters).

Sericornis (nouhuysi?) pontifex Stresemann

Sericornis arfakiana pontifex STRESEMANN, 1921, Anzeiger Ornith. Ges. Bayern, I, No. 5, p. 34.—Lordberg, Sepik Mts.

Similar to *S. n. stresemanni*, but back less rufous brown, more olivaceous; under parts paler.

RANGE.—Lordberg (1000 m.) and Hunsteinspitze (1500 m.), middle Sepik.

This form is, as its name indicates, rather intermediate between several others and combines in some respects the characters of *Sericornis beccarii virgatus* and *Sericornis nouhuysi stresemanni*. Its altitudinal distribution is from 1000 to 1500 meters, which is more or less that of the *beccarii*-group with which it also agrees in the light-colored bill. The general coloration, however, tends to be more brownish than that of the members of the *beccarii*-group, and the upper wing-coverts never show clearly defined white tips. Either there are no tips at all, or they are indistinct greenish-gray. The seven specimens in the Berlin Museum are very variable and it seems the best for the time being to consider them a subspecies of *nouhuysi*.

Sericornis nouhuysi oorti Rothschild and Hartert

Sericornis arfakiana oorti ROTHSCHILD AND HARTERT, 1913, Nov. Zool., XX, p. 503.—Bihagi, head of Mambare River.

Sericornis arfakiana keysseri STRESEMANN, 1925, Ornith. Monatsber., XXXIII, p. 59.—Rawlinson Mts. (Huon Peninsula) [type examined].

Upper parts brownish olivaceous, more brownish on the crown, more olive on the back; wings and tail brownish, upper wing-coverts without distinct light tips; forehead, lores, chin and area surrounding the eyes pale rufous buff; rest of under parts pale yellowish olivaceous; thighs and under tail-coverts washed with rufous brown.

Wing, ♂ 62–70 (65.1), ♀ 59–65 (62.2); tail, ♂ 43–50 (46.0), ♀ 42–48 (44.3).

RANGE.—Mountains of the Huon Peninsula and mountains of southeast New Guinea, up to 2800 meters.

Series from different parts of the range of this form are not always exactly alike, but there are no conspicuous differences between birds from the south coast of southeast New Guinea, those from the north coast and those from the Huon Peninsula.

Sericornis nouhuysi monticolus Mayr and Rand

Sericornis nouhuysi monticola MAYR AND RAND, 1936, Mitt. Zool. Mus. Berlin, XXI, p. 246.—Mt. Albert Edward, southwest slope, at 3680 meters.

Differs from *oorti* by larger size, paler and more grayish under parts and the duller upper parts.

Wing, ♂ 65–72 (68.9), ♀ 64–67 (65.3); tail, ♂ 49–55 (51.6), ♀ 50.

RANGE.—High mountains of southeast New Guinea, known from Mt. Albert Edward and from the mountains of Kotoi district, 11,000 feet (not quite typical) (Rothschild collection, Anthony coll.).

For further details see the original description. This interesting mountain race is apparently restricted to the mountain tops, and thus to small "islands" in the wide range of *oorti*.

Sericornis perspicillatus

A well-defined species of the mid-mountain forest of New Guinea which finds optimum conditions between 1600 and 2000 meters. There are no subspecies, unless *rufescens* (Salvadori) (= *Sericornis perspicillatus goodsoni* Hartert) is included in this species.

Sericornis perspicillatus Salvadori

Sericornis perspicillata SALVADORI, 1896, Ann. Mus. Civ. Genova, XXXVI, p. 99.—Moroka district, southeast New Guinea.

A conspicuous yellowish-ochre eye-ring and a black subterminal bar on the inner webs of all but the central pair of tail-feathers characterize this species. Upper parts olivaceous green, more grayish on crown and hind neck, more brownish olivaceous on lower back and rump; sides of head strongly contrasting with the crown, buffy

ochraceous, sometimes with a slight olivaceous wash on the ear-coverts; under parts buffy or pale ochraceous, washed with olivaceous on the sides of the breast and flanks; edges of wing-feathers olivaceous, paler on the outer primaries; tail olivaceous or brownish, all tail-feathers, except the central pair, with a black subterminal bar on the inner web.

Wing, ♂ 54–58, ♀ 50–56; tail, ♂ 39–44, ♀ 37–41; tarsus, 19–20 mm.

RANGE.—Mts. of southeast New Guinea, Saruwaged Mts., Sepik Mts., Oranje Range, Nassau Range and Weyland Mts.

There is a slight amount of geographical variation in New Guinea. Birds from the Weyland Mts. have the sides of the head paler, more ochraceous, less rufous, and the tail-band very broad and conspicuous, as much so as in *papuensis*. There is, however, considerable variation in regard to these two characters even in typical *perspicillatus* from southeast New Guinea and it seems best not to separate the Weyland birds as a subspecies.

Sericornis rufescens

Taxonomically this is one of the most troublesome members of the genus. It was originally described by Salvadori in 1875 as *Gerygone?* *rufescens*, on the basis of two males from Hatam, Arfak Mountains. Nothing more was heard of the species, until in 1928 I collected a series of about a dozen above Ditschi and at Dohunsehik, Arfak Mountains. These birds I identified in the field as ? *Sericornis perspicillatus*, but I suspected then that they were the same as *Gerygone?* *rufescens* Salvadori (see Ornith. Monatsber., XXXVIII, p. 176). Subsequently Dr. Hartert described the birds collected by me as *Sericornis perspicillata goodsoni*. Then I showed that *Sericornis bürgersi* was related to *rufescens*, and I considered the two even conspecific at that time. I had no opportunity at that time to compare directly the types of *Gerygone?* *rufescens* Salvadori and *Sericornis perspicillata goodsoni* Hartert. This I was able to do in 1934, owing to the kindness of the authorities of the Genova Museum, and found that both names referred to the same bird.

In the meantime Mayr and Rand (MS.) have shown that *Sericornis bürgersi*, *meeki* and *papuensis* all belong to one species and the question has arisen as to whether *rufescens* of the Arfak Mts. in western New Guinea should be considered the geographical representative of *perspicillatus* of eastern New Guinea, as suggested by Hartert, or of *papuensis*, as proposed by myself.

If we compare *rufescens* with *papuensis* and *perspicillatus* we find that it agrees in some characters with the former and in others with the latter, while in still other characters it is intermediate. It agrees with

papuensis in the general coloration of the upper parts, having both nape and back brownish olive, and lacking the contrast between the grayish-green crown and nape and the olive back of *perspicillatus*. It also agrees with *papuensis* in the broad and conspicuous black subterminal bar on the tail. In regard to the coloration of the crown and forehead, *rufescens* shows an intermediate condition. *S. papuensis* has (usually) a buffy forehead with blackish tips or edges on all the feathers of the anterior part of the crown, the feathers appearing scaly. In *S. perspicillatus* the green of the crown reaches right up to the bill, the feathers showing no blackish edges. In regard to the coloration of the sides of the face and the eye-ring, *rufescens* is also intermediate. *S. perspicillatus* has a light face which contrasts sharply with the crown, while in *rufescens* there is less contrast, and in *papuensis* there is a gradual blending between sides of face and crown; the eye-ring of *perspicillatus* is conspicuously tawny or yellowish ochre, in *rufescens* it is pale ochre, sometimes mottled with dusky brown, while in *papuensis* it is dull brown, more or less mottled with blackish, particularly in the anterior part. There are apparently no conspicuous differences in regard to the wing between all three species. The following are the characters in which *rufescens* agrees with *perspicillatus*: first, size; *rufescens* is a small bird, even smaller than *perspicillatus*, while *papuensis* is a large, robust bird. The bills of *rufescens* and *perspicillatus* are fairly broad at the base and then become very slender near the tip, while *papuensis* has a more typical *Sericornis* bill. The ear-coverts have blackish bases in *papuensis* but lack them in the other two species. *S. papuensis* rarely occurs below 2000 m. and is apparently most common between 2500 m. and 3000 m., while the ranges of *rufescens* and *perspicillatus* are from about 1500 to 2400 meters.

It seems impossible at the present time to determine whether *rufescens* is a geographical representative of *papuensis* or of *perspicillatus*. I therefore propose to treat it as a separate species. Every species of the genus *Sericornis*, that I have had an opportunity of observing in the field, had its own peculiar song, and probably it will be decided finally by a field ornithologist whether *rufescens* is more closely related to *papuensis* or to *perspicillatus*.

Sericornis rufescens (Salvadori)

Gerygone ? rufescens SALVADORI, 1876, Ann. Mus. Civ. Genova, VII (1875), p. 961.—Hatam, Arfak Mts. [type examined].

Sericornis perspicillata goodsoni HARTERT, 1930, Nov. Zool., XXXVI, p. 84.—Mt. Lehuma, Arfak Mts. [type examined].

Upper parts brownish olivaceous, warmer on lower back and rump; sides of face and eye-ring buff with a brownish tinge, ear-coverts darker; lores and foremost part of forehead lighter than crown, more buffy; under parts pale ochraceous, lighter, almost whitish, on the belly; edges of wing-feathers and wing-coverts slightly more greenish than the back, edges of outer primaries paler; tail olivaceous brown, black subterminal bar well pronounced on all but the central pair of tail-feathers; the two or three outermost pairs of tail-feathers sometimes with broad fulvous tips.

Wing, 6 ♂ 54–56 (54.5), 5 ♀ 50–52 (51.0); tail, 6 ♂ 38–40 (39.4), 4 ♀ 37–39 (37.8); culmen, 13–14; tarsus, 18–19; weight, 7.5–9.5 gr.

RANGE.—Arfak Mountains (1500 m. to 1800 m.).

Sericornis papuensis (De Vis)

The status and the variation of this species have been discussed in detail by Mayr and Rand¹ in the report on the birds of the Archbold-Rand New Guinea Expedition of 1933. This is a robust species with a strong bill and a long and broad tail. The feathers on the head appear scaly and the black bar across the tail is always well developed.

Sericornis papuensis papuensis (De Vis)

Acanthiza papuensis DE VIS, 1894, Ann. Rep. Brit. New Guinea, (1893–1894), p. 102.—Mt. Manaeao, southeast New Guinea.

Gerygone brunnea DE VIS, 1897, Ibis, p. 378.—Southeastern New Guinea.

For a detailed discussion of the extremely variable plumage see Mayr and Rand.¹ Young birds are usually very greenish.

Wing, 15 ♂ 57–61 (58.5); 4 ♂ imm. 55–56; 14 ♀ ad. 53–58 (55.0); 5 ♀ imm. 55–56.

RANGE.—High mountains of southeast New Guinea from 2000 m. to 3680 m.

Sericornis papuensis meeki Rothschild and Hartert

Sericornis meeki ROTHSCHILD AND HARTERT, 1913, Nov. Zool., XX p. 503.—Mt. Goliath, Oranje Range.

Very similar to the most greenish specimens of *S. p. papuensis*, but throat with a deeper and more distinct rufous wash; lower belly and under tail-coverts deeper olivaceous; upper parts similar, but forehead greenish, not buffy or whitish; bill shorter.

Two females: wings, 54, 56; tail, 38, 39; culmen, 13.5, 14; tarsus, 20.5, 20.5.

RANGE.—Oranje Range, Snow Mts.

Considering the extreme variability of *papuensis* it might be considered unwise to recognize a race founded on such slight characters as those of *meeki*; the two typical specimens of *meeki*, however, cannot be matched by any of the 50 specimens of *papuensis* in the Amer. Mus. of

¹ Mayr, E., and Rand, A. L., 1936, Bull. Amer. Mus. Nat. Hist., LXXIII, Art. I, pp. 120–126.

Nat. Hist. More material of *meeki* will have to be examined to determine the validity of this subspecies.

Sericornis papuensis bürgersi Stresemann

Sericornis bürgersi STRESEMANN, 1921, Anzeiger Ornith. Ges. Bayern, I, 5, p. 34.—Schraderberg, Sepik Mountains.

Similar to *S. p. papuensis*, but averaging much browner on crown, back and wings; lores, cheeks, ear-coverts and sides of head deep rufous brown, not greenish or ochraceous; wash of under parts more brownish, less greenish than in *papuensis*; tail very rufous brown.

Four males: wing, 59.5, 59.5, 60.5, 61; tail, 41, 42, 42, 44; culmen, 13, 13.5; tarsus, 20–21.

RANGE.—Sepik Mountains (Schraderberg, 2000 m.) and Weyland Mountains (2400 m.).

The type of this race is a rather greenish specimen and agrees fairly well with some specimens of *papuensis*, except for the brownish sides of the head; the three paratypes are, however, more brownish than any of the southeast New Guinea specimens.

Birds from the Weyland mountains are not as dark and brownish as typical Sepik Mountain specimens, but are better referred to this race than to *papuensis*.

Sericornis arfakianus

A small, greenish species, with light under parts. The tail with an inconspicuous dark subterminal bar. Lives in the hill forest between 800 m. and 1600 m.

Sericornis arfakianus arfakianus (Salvadori)

Gerygone ? Arfakiana SALVADORI, 1876, Ann. Mus. Civ. Genova, VII, p. 960.—Arfak Mts.

Upper parts grayish green, more olivaceous on lower back and rump; wings greenish, outer edges of primaries with a brownish tinge; tail brownish olive, with a rather obscure dark subterminal bar; lores and sides of head grayish green; underparts yellowish white without any streaks, but with a slight greenish wash, which is more grayish on the breast and more olivaceous on the flanks.

Wing, ♂ 53–56, ♀ 49–51; tail, ♂ 38–41, ♀ 35–38; tarsus, 18–20.

RANGE.—Arfak Mts., Wandammen Mts. (Mt. Wondiwoi) and Cyclop Mts.

Females are similar to the males, but smaller and paler underneath.

Birds from the above-mentioned three mountain ranges do not form a uniform population. Birds from the Wondiwoi Mt. have a buffy wash underneath and are above much more brownish olive, while birds from

the Cyclops Mts. are somewhat intermediate. The differences do not seem important enough to warrant the recognition of subspecies.

Sericornis arfakianus olivaceus Salvadori

Sericornis olivacea SALVADORI, 1896, Ann. Mus. Civ. Genova, XXXVI, p. 100.—Moroka, southeast New Guinea.

Sericornis pusilla ROTHSCHILD AND HARTERT, 1903, Nov. Zool., X, p. 228.—Mt. Gayata, southeast New Guinea [type examined].

Similar to *arfakianus*, but under parts, particularly in the males, with grayish-olive streaks; lores and sides of face darker grayish olive; upper parts more oliveaceous and tail brown; subterminal bar on tail more conspicuous.

Wing, ♂ 52–55, ♀ 49–52; tail, ♂ 40–41, ♀ 38–39.5; culmen, 14; tarsus, 18–20.

RANGE.—Mts. of southeast New Guinea, Saruwaged Mts., Sepik Mts. and Weyland Mts.

Birds from the Weyland Mts. have the streaking of the under parts not very pronounced, but otherwise agree well with southeast New Guinea birds.

